

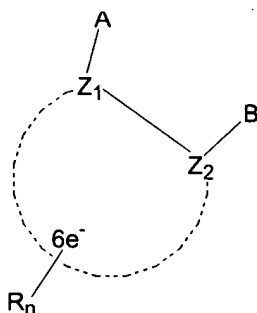
## AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

### Listing of Claims:

1 – 102. (canceled)

103. (currently amended) A method of increasing the vigor and/or the yield of an agronomic plant that is not affected by Take-all disease and which is a bean which is selected from the genera *Vigna*, *Glycine*, *Vicia* and *Phaseolus* group consisting of garden pea, alfalfa, peanuts, soybeans, vetch, cowpeas, fava bean, trefoil, clovers and *Phaseolus spp.* beans, wherein the method comprises treating the plant or its propagation material with a composition which comprises an effective amount of a fungicide having the formula



wherein Z<sub>1</sub> and Z<sub>2</sub> are C and are part of a thiophene ~~an aromatic ring selected from benzene, thiophene, furan, and benzothiophene;~~

A is selected from ~~--C(X)-amine, --C(O)SR<sub>3</sub>, NH-C(X)R<sub>4</sub>, and C(=NR<sub>3</sub>)--XR<sub>7</sub>;~~

B is ~~--W<sub>m</sub>--Q(R<sub>2</sub>)<sub>3</sub> or selected from o-tolyl, 1-naphthyl, 2-naphthyl, and 9-phenanthryl, each optionally substituted with halogen or R<sub>4</sub>;~~

Q is C, or Si;

W is ~~--C(R<sub>3</sub>)<sub>p</sub>H<sub>(2-p)</sub>--; or when Q is C, W is selected from --C(R<sub>3</sub>)<sub>p</sub>H<sub>(2-p)</sub>--N(R<sub>3</sub>)<sub>m</sub>H<sub>(1-m)</sub>--S(O)<sub>p</sub>--, and --O--;~~

X is O or S;

n is 0, 1, or 2, ~~or 3~~;

m is 0 or 1;

p is 0, 1, or 2;

each R is independently selected from

a) halo, ~~formyl, cyano, amino, nitro, thiocyanato, isothiocyanato, trimethylsilyl,~~  
and hydroxy;

b) C<sub>1</sub>-C<sub>4</sub> alkyl, ~~alkenyl, alkynyl, C<sub>3</sub>-C<sub>6</sub> cycloalkyl, and cycloalkenyl,~~ each optionally substituted with halo, or hydroxy, ~~thio, amino, nitro, cyano, formyl, phenyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, alkylcarbonyl, alkylthio, alkylamino, dialkylamino, alkoxycarbonyl, (alkylthio)carbonyl, alkylaminocarbonyl, dialkylaminocarbonyl, alkylsulfinyl, or alkylsulfonyl; and~~

c) ~~phenyl, furyl, thienyl, pyrrolyl,~~ each optionally substituted with halo, formyl, cyano, amino, nitro, C<sub>1</sub>-C<sub>4</sub> alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylamino, dialkylamino, haloalkyl, and haloalkenyl;

d) C<sub>1</sub>-C<sub>4</sub> alkoxy, ~~alkenoxyl, alkynoxyl, C<sub>3</sub>-C<sub>6</sub> cycloalkyloxy, cycloalkenyloxy,~~ alkylthio, or alkylsulfinyl, alkylsulfonyl, ~~alkylamino, dialkylamino, alkylcarbonylamino, aminocarbonyl, alkylaminocarbonyl, dialkylaminocarbonyl, alkylcarbonyl, alkylcarbonyloxy, alkoxycarbonyl, (alkylthio)carbonyl, phenylcarbonylamino, phenylamino,~~ each optionally substituted with halo;

~~wherein two R groups may be combined to form a fused ring;~~

each R<sub>2</sub> is independently selected from alkyl, ~~alkenyl, alkynyl, cycloalkyl, cycloalkenyl and phenyl,~~ each optionally substituted with R<sub>4</sub> or halogen; and wherein, when Q is C, R<sub>2</sub> may also be selected from halo, ~~alkoxy, alkylthio, alkylamino, and dialkylamino; and~~

~~wherein two R<sub>2</sub> groups may be combined to form a cyclo group with Q;~~

~~R<sub>3</sub> is C<sub>1</sub>-C<sub>4</sub> alkyl;~~

~~R<sub>4</sub> is C<sub>1</sub>-C<sub>4</sub> alkyl, haloalkyl, alkoxy, alkylthio, alkylamino, or dialkylamino;~~

~~R<sub>7</sub> is C<sub>1</sub>-C<sub>4</sub> alkyl, haloalkyl, or phenyl, optionally substituted with halo, nitro, or R<sub>4</sub>;~~

or an agronomic salt thereof, wherein the plant or its propagation material possesses a transgenic event providing the plant with resistance to a herbicide that is ~~selected from the group consisting of resistance to glyphosate, glufosinate, imidazolinone herbicides, and sulfonyleurea herbicides and the treatment comprises foliar application of glyphosate said herbicide.~~

104, 105. (canceled)

106. (previously presented)      The method according to claim 103, wherein the fungicide is 4,5-dimethyl-*N*-2-propenyl-2-(trimethylsilyl)-3-thiophenecarboxamide.

107. (canceled)

108. (currently amended)      The method according to claim 103, wherein the treatment comprises treating the seed of the plant with an inoculant selected from the group consisting of *Azospirillum spp.*, *Rhizobium spp.*, *Bradyrhizobium spp.*, a mixture of *Rhizobium spp.* and *Bradyrhizobium spp.*, and a mixture of either *Rhizobium spp.*, or *Bradyrhizobium spp.* with any other microorganisms, and further includes foliar treatment of the plant with the fungicide, and foliar application of glyphosate ~~said~~ herbicide.

109. (currently amended)      The method according to claim 103, wherein the step of treating the plant or its propagation material comprises applying the fungicide to the foliage of the plant in combination with glyphosate ~~said herbicide~~.

110, 111. (canceled)

112. (previously presented)      The method according to claim 109, wherein the fungicide is 4,5-dimethyl-*N*-2-propenyl-2-(trimethylsilyl)-3-thiophenecarboxamide.

113. – 116. (canceled)

117. (previously presented)      The method according to claim 103, where the treatment of the plant or its propagation material comprises treatment of a seed with an inoculant comprising *Azospirillum spp.*, or *Rhizobium spp.*, or *Bradyrhizobium spp.*, or a

mixture of *Rhizobium spp.* and *Bradyrhizobium spp.*, or a mixture of either *Rhizobium spp.*, or *Bradyrhizobium spp.* with any other microorganisms.

118 - 134. (canceled)

135. (currently amended) The method according to claim 103, wherein

~~Z<sub>1</sub> and Z<sub>2</sub> are C and are part of an aromatic ring which is thiophene;~~

A is -C(O)-amine ~~selected from -C(X)-amine~~, wherein the amine is substituted with a first and a second amine substituent or with an alkylaminocarbonyl and a hydrogen, --C(O)--SR<sub>3</sub>, --NH--C(X)R<sub>4</sub>, and --C(=NR<sub>3</sub>)-XR<sub>7</sub> ;

the first amine substituent is selected from the group consisting of C<sub>1</sub> - C<sub>10</sub> straight or branched alkyl, alkenyl, or alkynyl groups or mixtures thereof optionally substituted with one or more halogen, hydroxy, alkoxy, alkylthio, nitrile, alkylsulfonate, haloalkylsulfonate, phenyl, C<sub>3</sub> - C<sub>6</sub> cycloalkyl and C<sub>5</sub> - C<sub>6</sub> cycloalkylkenyl; phenyl optionally substituted with one or more C<sub>1</sub> - C<sub>4</sub> straight or branched alkyl, alkenyl, or alkynyl groups or mixtures thereof, cycloalkyl, cycloalkenyl, haloalkyl, alkoxy and nitro; C<sub>3</sub> - C<sub>6</sub> cycloalkyl, C<sub>5</sub> - C<sub>6</sub> cycloalkenyl, alkoxy, alkenoxy, alkynoxy, dialkylamino, and alkylthio;

and the second amine substituent is selected from the group consisting of hydrogen; C<sub>1</sub> - C<sub>6</sub> straight or branched alkyl, alkenyl, or alkynyl groups or mixtures thereof optionally substituted with one or more halogen, hydroxy, alkylcarbonyl, haloalkylcarbonyl, alkoxy carbonyl, and dialkylphosphonyl;

~~B is -W<sub>m</sub>-Q(R<sub>2</sub>)<sub>3</sub> or selected from o-tolyl, 1-naphthyl, 2-naphthyl, and 9-phenanthryl, each optionally substituted with halogen or R<sub>4</sub>;~~

~~Q is C, or Si;~~

~~W is -C(R<sub>3</sub>)<sub>p</sub>-H<sub>(2-p)</sub>; or when Q is C, W is selected from -C(R<sub>3</sub>)<sub>p</sub>-H<sub>(2-p)</sub>, -N(R<sub>3</sub>)<sub>m</sub>-H<sub>(1-m)</sub>, -S(O)<sub>p</sub>, and -O-;~~

~~X is O or S;~~

~~n is 2;~~

~~m is 0 or 1;~~

~~p is 0, 1, or 2;~~

~~wherein two R groups are combined to form a nonheterocyclic ring fused with the thiophene ring, which is not a benzothiophene other than a tetrahydrobenzothiophene, said two R groups being selected from the group consisting of C<sub>1</sub>–C<sub>4</sub> alkyl, alkenyl, C<sub>3</sub>–C<sub>6</sub> cycloalkyl and cycloalkenyl, each optionally substituted with hydroxy, thio, phenyl, C<sub>1</sub>–C<sub>4</sub> alkoxy, alkylthio, alkylsulfinyl, or alkylsulfonyl;~~

~~each R<sub>2</sub> is independently selected from alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl and phenyl, each optionally substituted with R<sub>4</sub> or halogen; and wherein when Q is C, R<sub>2</sub> may also be selected from halo, alkoxy, alkylthio, alkylamino, and dialkylamino; and further when Q is C, then two R<sub>2</sub> groups may be combined to form a cycloalkyl group with Q;~~

~~R<sub>3</sub> is C<sub>1</sub>–C<sub>4</sub> alkyl;~~

~~R<sub>4</sub> is C<sub>1</sub>–C<sub>4</sub> alkyl, haloalkyl, alkoxy, alkylthio, alkylamino, or dialkylamino; and~~

~~R<sub>7</sub> is C<sub>1</sub>–C<sub>4</sub> alkyl, haloalkyl, or phenyl, optionally substituted with halo, nitro, or R<sub>4</sub>; or an agronomic salt thereof.~~

136 - 137. (canceled)

138. (currently amended) The method according to claim 135 ~~claim 137~~, wherein A is -C(O)-amine, wherein the amino radical is substituted with one or two groups selected from hydrogen; hydroxy; alkyl, alkenyl, and alkynyl, which may be straight or branched chain or cyclic; alkoxyalkyl; haloalkyl; hydroxyalkyl; alkylthio; alkylthioalkyl; alkylcarbonyl; alkoxy carbonyl; aminocarbonyl; alkylaminocarbonyl; cyanoalkyl; and ~~mono- or dialkylamino; phenyl, phenylalkyl or phenylalkenyl, each optionally substituted with one or more C<sub>1</sub>–C<sub>4</sub> alkyl, alkoxy, haloalkyl, C<sub>3</sub>–C<sub>6</sub> cycloalkyl, halo, or nitro groups; and C<sub>1</sub>–C<sub>4</sub> alkyl or alkenyl substituted with pyrimidinyl, thienyl, or furanyl; and wherein the amino radical may be a N-bonded heterocycle selected from morpholine, piperazine, piperidine, pyrrole, pyrrolidine, imidazole, and triazoles, each optionally substituted with C<sub>1</sub>–C<sub>6</sub> alkyl groups.~~

139. (cancelled)

140. (previously presented)      The method according to claim 137 ~~claim 139~~, wherein Q is Si.

141. (cancelled)

142. (currently amended)      The method according to claim 140 ~~claim 141~~, wherein each R<sub>2</sub> is methyl.

143. (previously presented)      The method according to claim 142, wherein A is alkylaminocarbonyl or dialkylaminocarbonyl.

144 – 152. (canceled)

153. (currently amended)      The method according to claim 103, wherein the agronomic plant that is a legume is selected from the genera *Glycine* ~~group consisting of soybeans fava beans, *Phaseolus* spp. beans, garden pea, and cowpeas.~~

154. (canceled)

155. (previously presented)      The method according to claim 103, wherein the agronomic plant is a soybean plant.

156. (previously presented)      The method according to claim 103, wherein the treatment comprises treatment of a seed, wherein the seed is treated with an amount of the composition sufficient to include the fungicide in an amount that is within the range of about 0.1 gm/100 kg of seed to about 500 gm/100 kg of seed.

157. (previously presented)      The method according to claim 156, wherein the seed is treated with an amount of the composition sufficient to include the fungicide in an amount that is within the range of about 10 gm/100 kg of seed to about 100 gm/100 kg of seed.

158. (previously presented)      The method according to claim 156, wherein the seed is treated with an amount of the composition sufficient to include the fungicide in an amount that is within the range of about 20 gm/100 kg of seed to about 50 gm/100 kg of seed.